User's Manual

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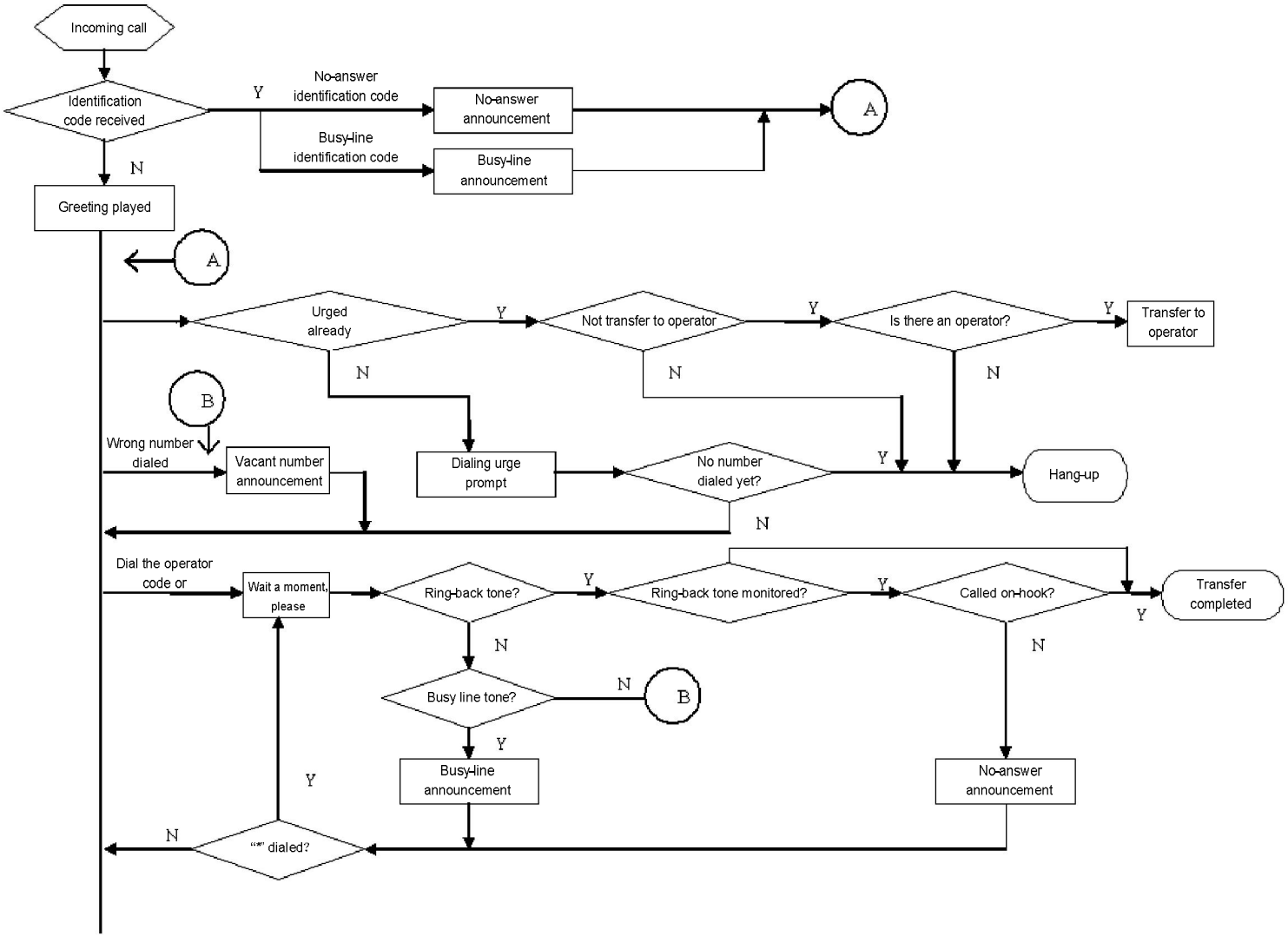
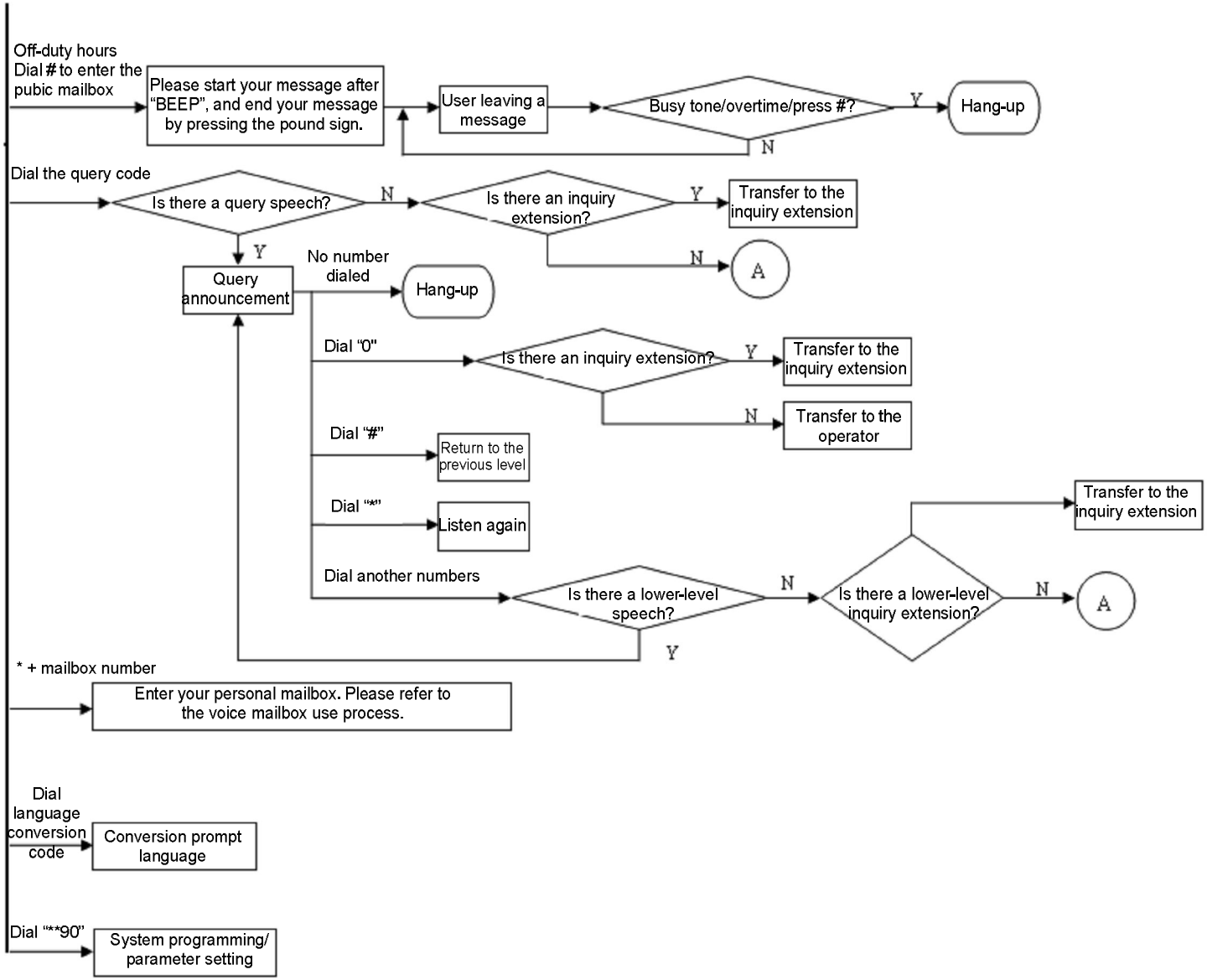
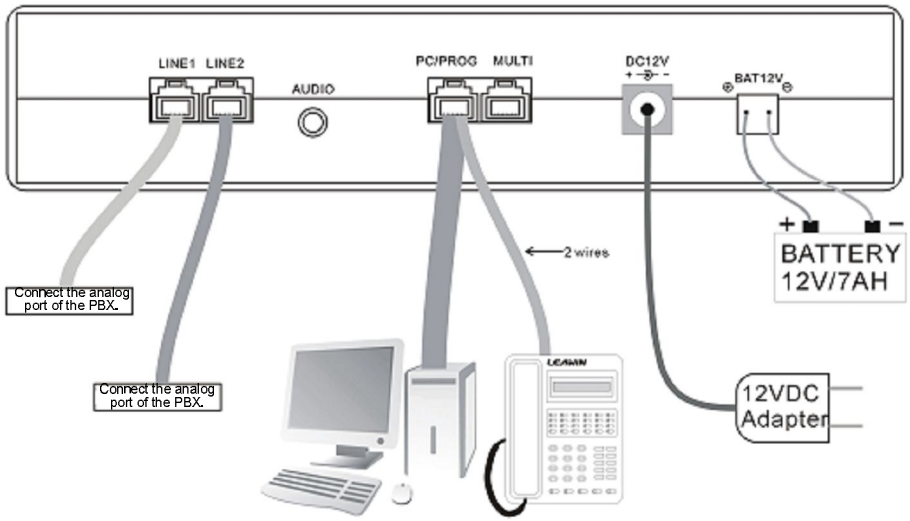
Chapter 1 Dynamic Flow Chart




Off-duty hours
Dial # to enter the pubic mailbox
Please start your message after "BEEP", and end your message by pressing the pound sign.
User leaving a message
Busy tone/overtime/press #?
Y
Hang-up
N
Dial the query code
Is there a query speech?
N
Is there an inquiry extension?
Y
Transfer to the inquiry extension
N
A
Y
Query announcement
No number dialed
Hang-up
Dial "0"
Is there an inquiry extension?
Y
Transfer to the inquiry extension
N
Transfer to the operator
Dial "#"
Return to the previous level
Dial "*"
Listen again
Dial another numbers
Is there a lower-level speech?
N
Is there a lower-level inquiry extension?
N
A
Transfer to the inquiry extension
Y
* + mailbox number
Enter your personal mailbox. Please refer to the voice mailbox use process.
Dial language conversion code
Conversion prompt language
Dial "**90"
System programming/ parameter setting

Chapter 2 Installation Guideline

2.1 Backplane Wiring Layout



Front indicators:

- **LINE1~2**: 1/2 channel operating indicator
- **STATUS**: Status indicator
- **POWER**: Power supply indicator

Rear panel ports:

- **LINE1 LINE2**: Connecting call ringing extensions of the PBX
- **AUDIO**: Connecting external audio signal
- **PC/PROG**: Connecting a PC or programmed telephone set
- **MULTI**: Equipment cascade port
- **DC12V**: Connecting a DC12V power adapter
- **BAT12V**: Connecting a backup power (12V battery)

Accessories:

Power adapter (DC 12V 500mA)	1 PCS
Backup power battery connection line	1 PCS
Audio connection line for recording	1 PCS
Computer serial port connection line	1 PCS
CD-ROM	1 PCS
LW-OP6200 User's Manual	1 PCS
LW-OP6200 Quick Installation Guideline	1 PCS
Public mailbox operation flow chart	1 PCS

1.2 Entering and Exiting the System Program

The system program is designed to set the parameters of your automated attendant, which can serve you better in your PBX device only with appropriate settings.

1) Entering the system program

1. Field programming: Connect an ordinary dual-tone key pad telephone set to the PC/PROG port of the equipment with a two-core telephone line, pick up the receiver or press the hand-free button, and enter a corresponding code for setting upon hearing "Welcome to the Leawin voice system. Please input a code…".
2. Remote programming: Call the extension number of the equipment with an external line or an extension, and upon hearing the greeting, input ****90** and the correct remote programming password (1234 by default) to enter the system program, and input a corresponding code for setting.
3. Computer programming: Connect the equipment to a computer with a serial port line. Power on the equipment, run the setting software and read the configuration to start setting. Upon completion of the setting, click to write configurations. For details about the operations, please consult the software help.

Parameter setting method:

Upon entering the system program, you will hear “Welcome to the Leawin voice system. Please input a code”. After you input a corresponding code, the system will announce the code and the current setting value of this parameter, and prompt “Please press the pound sign to confirm, or input a new setting value”. Input parameter values of the code, and end each of them with the pound sign (#). The system will announce the new setting values. If it is unnecessary to change the current parameter values, press **#** to save them and the system will prompt “Please input a code”. After setting each parameter, input ***900** to save the settings and exit the programming status.

Note: No voice, message, or reference materials will get lost in case of power failure.

2) Exiting the system program

1. During field/remote programming, input ***900** to save the settings and exit from the program.

2. Computer setting: Upon completion of write configuration, the settings will be saved in the equipment.

1.3 Installation Procedures

(1) Equipment connection

According to the wiring layout, attach an extension line of the PBX to a LINE port of the LW-OP6200, and connect the 12V DC power supply. The equipment will switch on automatically. When a few clicks are sounded, and the POWER indicator begins to flash, it means the equipment starts successfully.

(2) Setting the PBX (a prerequisite for use of the automated attendant)

Set the extension port of the equipment to ring when there is an incoming call from an external line. By setting the PBX, you can include the extension number used by the equipment into the same incoming call ringing group.

(3) Conditions for creating signal tone period parameters and setting flashing intervals (not required for use of an ordinary PBX)

- First use an ordinary telephone set to identify the transfer mode of the PBX. If it is not a flashing operation, please set the code 4200 - Transfer mode. The default setting is “7*6 – flashing + extension number”.
- **Perform the following functional status operations as required**

  Dial the extension number of the equipment with an external line or an extension. Upon hearing the first greeting “Hello! Welcome to our Company", input:

  **10 + function password Rechecking the signal tones (including ring-back tone, internal line busy tone and vacant number tone)
  **11 + function password Checking the ring-back tone
  **12 + function password Checking the internal line busy tone
  **13 + function password Checking the vacant number tone
  **14 + function password Checking the external line busy tone
  **20 + function password Rechecking the flashing intervals.
  **30 + function password Rechecking the flashing intervals and signal tones
  **50 + public mailbox password Entering the public mailbox
  **90 + programming password Starting programming

  All the passwords mentioned above are set to 1234 by default.

(4) **Setting an extension number group, operator number, group assistance extension, work and rest timetable, and time parameter** (refer to Chapter 3 “Parameter Descriptions”)

(5) Recording greetings (speech of welcome)

Use the code 5101 to record on-duty greetings in Mandarin. Record other speeches or record the greetings in other languages as required. Refer to the Greeting Code Table.

(6) Set up a public mailbox (refer to Chapter 4 “Using the Public Mailbox”)

(7) Set up a consultation system if required (refer to Chapter 5 “Consultation System”)

1.4 PBX Requirements

When working in the default mode, the equipment requires that the single line telephone (SLT) port in use should not be the VM/AA port (a port without attendant function). If the equipment uses the VM/AA port, it is necessary to use an ordinary port to check the signal tone before connecting the equipment to the VM/AA port, and enter the system program to set the signal tone check method to the DTMF identification code or signal tone + DTMF identification code (the value of code 4007 is 2 or 3). Set the codes of related identification codes as required.

Check the codes related to the DTMF identification codes:

4602 – Wait time for the first code of the signal tone identification code, ranging from 0 to 60000 milliseconds, with a default value of 0, indicating to disable check of the signal tone identification code.

4603 – Intervals between signal tone identification codes, ranging from 0 to 60000 milliseconds, with a default value of 510.

4610 – Wait time for the first code of the call type identification code, ranging from 0 to 60000 milliseconds, with a default value of 0, indicating to disable check of the call type identification code.

4611 – Intervals between call type identification codes, ranging from 0 to 60000 milliseconds, with a default value of 510.

4400–4411 – Signal tone identification codes.

4700–4709 – Call type identification codes. Refer to the code table for details.

Chapter 3 Parameter Descriptions

3.1 Extension Group

11GG Setting a group start number

12GG Setting a group end number

10GG Deleting a specified extension group (GG is a group number, ranging from 01 to 32.)

1000 Deleting all extension groups

For example, if your company has two extension groups (100~200 and 500~800), then:

Input the code 1101 to set the start number 100 of the first extension group;

Input the code 1201 to set the end number 200 of the first extension group;

Input the code 1102 to set the start number 500 of the second extension group;

Input the code 1202 to set the end number 800 of the second extension group.

Notes: 1. You are advised to set this item, so that when an external line dials a number other than an extension group, a prompt that it is a vacant number will be announced, so as to improve the transfer efficiency of the attendant.

2. Maintain connection of the extension numbers in a group. All the numbers in a group have the same quantity of digit, which is up to 16.

3.2 Group Assistant Extension

13GG Setting a group assistant extension (GG is a group number, ranging from 01 to 32.)

When an external line dials an extension, which is busy or gives no answer, the system will prompt the external line to call another number or leave a message. If the external line dials no number within the wait time, it will be forwarded to the assistant extension of the group to which the initially dialed extension belongs.

3.3 Operator

20MP Setting an operator number

M indicates a work period, ranging from 0 to 5. 0 - All work periods; 1 - On duty; 2 - Noon break; 3 - Off duty; 4 – Holiday; 5 – Temporary. P indicates port 1 or 2, and when it is set to 0, all ports will be specified.

3000 Setting a speed dial operator number (you may set it from 0 to 9, and 0 is the default number for transfer to the operator.)

3002 Setting transfer to the operator if no extension is dialed

When you press the speed dial operator number upon hearing the greeting "Hello! Welcome to our company…", the system will forward your call to the corresponding operator according to the current incoming port number and the current time period.

Note: The speed dial operator number should be different from the initial digit of any extension number.

3.4 Follow-Me Function

62 X Setting the follow-me function. X indicates the extension involved.

For example, to set 168 as the follow-me number of extension 245,

Program input of 62245#, and set 168#.

Any external line that dials extension 245 will be transferred to the extension 168. This can also be used as a manager/secretary function, which can transfer any call to a manager to his/her secretary.

2100 Deleting all follow-me numbers.

3.5 Number Acknowledgement

3001 Number acknowledgement: 1 – Yes; 0 – No.

This function means whether the attendant will announce the extension number dialed by a user.

3.6 Recording Greeting (Speech of Welcome)

5LVV Self-recorded speech management. "Press 1 to listen, press 2 to record again, press 3 to delete, or press any other key to return to the

previous level." L indicates a language type (built in the attendant system; 1-Mandarin; 2-Cantonese; 3-English; you can use other languages.) VV indicates a prompt index code, which ranges from 01 to 14, and 21 to 30. (Refer to the attached page for details.)

5L00 Deleting all self-recorded prompts in language L

5000 Deleting all self-recorded speeches

Notes: 1. A recorder must press the # key to end the recording after reading a speech, because hanging up directly will record together the resulting noise and busy tone.

2. To improve recording quality, the recorder is advised to connect a programming interface directly with a telephone set when the equipment is idle.

3.7 Language Conversion

3601 First language conversion code (used to change the system to Mandarin.)

3602 Second language conversion code (used to change the system to Cantonese.)

3603 Third language conversion code (used to change the system to English.)

A conversion code can have up to 8 digits. You can first record a greeting in a language on you own, and then change it to the other two languages by pressing conversion codes during the greeting.

Note: A language conversion code cannot be the same as the operator number or inquiry number, or the initial digit of any extension number. Set *0 to cancel a conversion code.

3.8 Work and Rest Timetable and System Time Setting

3409 System clock

There are totally 11 digits, designed in the sequence of year, month, day, hour, minute, and week. Year, month, day, hour, and minute occupy two digits respectively, and week occupies one digit. Sunday is indicated by 7. Time is displayed in the 24-hour format. For example, if the current time is 8:30 on Saturday, September 1, 2007, the setting should be 07090108306.

3401 Work start and end time on Monday

3402 Work start and end time on Tuesday

3403 Work start and end time on Wednesday

3404 Work start and end time on Thursday

3405 Work start and end time on Friday

3406 Work start and end time on Saturday

3407 Work start and end time on Sunday

3408 Noon break

There are 8 digits in the format of HHMMhhmm, in which HHMM indicates work start time, and hhmm indicates work end time. For example, if you start work at 8:00, and get off work at 17:30, it is 08001730.

35HH Setting a holiday. HH ranges from 01 to 64, with four digits, two for month and day each.

3500 Deleting all holidays.

3400 0 – Automatic switch; 1 – On duty; 2 – Noon break; 3 – Off duty; 4 – Holiday; 5 – Temporary. Default: 0.

The following functions are available when you hear the first greeting "Hello! Welcome to us…" after entering the automated attendant.

**70 + function password Returning to automatic switch during work period

**71 + function password Switching to on-duty during work period

**72 + function password Switching to noon break during work period

**73 + function password Switching to off-duty during work period

**74 + function password Switching to holiday during work period

**75 + function password Switching to temporary during work period

All the function passwords are 1234.

3.9 Password Setting

3600 Programming a password remotely

3610 Function password

A password consists of up to 8 digits, and if it has less than 8 digits, you can end it with "#". The default password is 1234. To disable a password, input ***0**.

3.10 Internal Line Signal Tone Monitoring Mode

4008 1 – Full monitoring (default); 2 – Semi-monitoring; 3 – No monitoring

Full monitoring means, when learning that the extension a user is dialing is busy, the attendant will retrieve the external line and notify the user that the extension is busy. If the extension is idle, the attendant will monitor it constantly and will not release it until the user hangs up, or will retrieve the external line upon expiry of a specified period and indicate no answer.

Semi-monitoring means, when learning that the extension a user is dialing is busy, the attendant will retrieve the external line and announce the extension is busy. If the extension is idle, the attendant will release the line to complete the transfer, so the prompt of no answer will not be announced. If the prompt of no answer is needed, it is necessary to set 4206 to specify a substitute for retrieval of the external line (input the setting directly according to the substitution parameters and means of the model of the PBX in use).

No monitoring means, after transferring an extension, the attendant will release the line immediately in spite of the signal tone.

Note: When setting a function code and an end code for the PBX, use "**" for *, "*1" for #, "*2" for A, "*3" for B, "*4" for C, "*5" for D, "*6" for an extension number, "*7" for flashing, "*8" for hang-up, "*9" for pause, and "*0" for deletion of an input. Substitution time is the value set in 33XM (wait-for-answer transfer time). Substitution time must be shorter than the time of "No-answer ringing tone" preset in the PBX, or the external line cannot hear the indication of no answer.

Example: The substitution operation of Panasonic's KX-TD88CN is "41 + extension number", so the mode of setting 4206 to specify a substitute for external line retrieval is "41*6".

The substitution operation of Tongli PBX is "54 + extension number", so the mode of setting 4206 to specify a substitute for external line retrieval is "**54*6**".

Note: Full monitoring releases the line after judging the called extension has answered, so there will be a delay. Semi-monitoring releases the line after judging the called extension is idle, and will not check its status and notify the calling party until expiry of the wait-for-answer transfer time, so there will be no delay for answering a call.

33XM Wait-for-answer transfer time

X=1 indicates transfer to an extension, 2 indicates transfer to the operator, and 0 indicates simultaneous setting of an extension and the operator. M indicates a work period: 0 – Automatic switch; 1 – On duty; 2 – Noon break; 3 – Off duty; 4 – Holiday; 5 – Temporary. It can range from 5 to 600 seconds, and the default is 20 seconds.

3.11 Internal Line Status Check Mode

4007 1 – Signal tone; 2 – Identification code; 3 – Signal tone + identification code

4602 – Wait time for the first code of the signal tone identification code, ranging from 0 to 60000 milliseconds, with a default value of 0, indicating to disable check of the signal tone identification code.

4603 – Intervals between signal tone identification codes, ranging from 0 to 60000 milliseconds, with a default value of 510.

4610 – Wait time for the first code of the call type identification code, ranging from 0 to 60000 milliseconds, with a default value of 0, indicating to disable check of the call type identification code.

4611 – Intervals between call type identification codes, ranging from 0 to 60000 milliseconds, with a default value of 510.

4400–4411 - Signal tone identification codes.

4700–4909 - Call type identification codes.

3.12 Return Equipment Parameters and Greetings to Factory Settings (Complete Clearing of the System)

Upon hearing the prompt after getting through to the automated attendant extension, input ****90**, and use the password 1234 to start programming. Input the code *904 and press **1**. When “BEEP” is surely heard, it indicates the parameters have returned to their defaults, and all the self-recorded speeches (including greetings, inquiries, and messages) will be cleared.

Example:

A company has extension numbers of 100-350 and 500-655, two on-duty operator numbers of 110 and 550, and an operator code of 0. The assistant extension for group 1 is 120, and the assistant extension for group 2 is 510. The extension numbers for access to the attendant are 150 and 600. The equipment is set to work in the semi-monitoring mode, the substitution function code of the PBX is *59, and the transfer mode is function code + extension number. The remote programming password is modified to 2828, and the password for listening to public mailbox messages is 8888. The conversion code for Mandarin is 7, Cantonese 8, and English 9. The first channel of voice prompt is announced in Mandarin, and the second in Cantonese.

Steps: By setting the PBX, use the extensions 150 and 600 of the PBX as the incoming call ringing numbers, and connect them to the LINE1 and LINE2 ports of the attendant. Use an extension to get through to one of the extensions of the attendant, and upon hearing the prompt, dial ****9** and input the password **1234** (or connect a telephone set with a two-core line directly to the PC/PROG port of the attendant) to start programming.

Input 1101 to set the start number of group 1 to 100;

Input 1201 to set the end number of group 1 to 350;

Input 1301 to set the assistant extension of group 1 to 120;

Input 1102 to set the start number of group 2 to 500;

Input 1202 to set the end number of group 2 to 655;

Input 1302 to set the assistant extension of group 2 to 510;

Input 3000 to set the operator transfer code to 0;

Input 2011 to set the first channel of operator number during on-duty period to 110;

Input 2012 to set the second channel of operator number during on-duty period to 550;

Input 3601 to set the Mandarin conversion code is 7;

Input 3602 to set the Cantonese conversion code is 8;

Input 3603 to set the English conversion code is 9;

Input 3001 to set pressing 1 to set the first channel of voice prompt to Mandarin;

Input 3102 to set pressing 2 to set the second channel of voice prompt to Cantonese;

Input 4008 to set monitoring mode to 2 – semi-monitoring;

Input 4206 to specify a substitute for external line retrieval. Input **59*6;

Input 3600 to set the remote programming password to 2828;

Input 2305 to set the password for listening to public passwords to 8888;

Input 5101, and record on-duty greetings in Mandarin with a microphone. The content for recording is: “Hello! Welcome to our company. Please dial an extension or dial zero for service from the operator. Press 8 for Cantonese, or press 9 for English.”

Input 5201, and record on-duty greetings in Cantonese. The content for recording is: “Hello! Welcome to our company. Please dial an extension or dial zero for service from the operator. Press 7 for Mandarin, or press 9 for English.”

Input *900 to exit from programming.

Chapter 4 Public Mailbox

The OP6200 system provides you with a public telephone secretary that can help you keep messages from calling parties when you are busy or out. Then the mailbox owner can retrieve, retain, or delete any message of the mailbox through a telephone set. For convenience, the mailbox owner can modify the public mailbox password, mailbox greeting, and message notification mode at any time and place.

The LM OP6200 system provides a public mailbox storing up to 310 messages, each of which can last 999 seconds. When there is any external call to a personal extension that is busy or the call is not answered, all messages on the extension will be saved to the public mailbox.**Leaving messages**

1. When no number is dialed or a vacant number is dialed after access of an external call to the automated attendant, press **#** to leave a message, and then press **#** again to confirm.
2. When a personal extension is dialed after access of an external call to the automated attendant, if the extension announces that the line is busy or gives no answer, press **#** to leave a message, and then press **#** again to confirm.
3. When the automated attendant is configured with an extension for public mailbox message notification, the automated attendant will notify its user of the message by two means: calling the extension and switching on the message indicator. (For the latter, the notification extension should be equipped with the message indication function.)

- The automated attendant rings back to the extension with a message within the time specified by the user, and will switch on the message indicator of the extension when there is a new message to notify the user of the new message.
- To switch on the message indicator, the user needs to use the codes 4207 (for switch-on of the indicator) and 4208 (for switch-off of the indicator), and use the code 3210 to set the message indicator control port.

5. **Message retrieval**

   Use an external line or an extension to call the LW-OP6200, and input "*+*50" upon hearing the greetings. Then input the mailbox password "1234" as prompted, and you can first hear how many messages are kept, and then operate as instructed. Or you can pick up the receiver during ringing, and input the mailbox password "1234" to enter the mailbox operations.

6. Related Programming

Enabling a mailbox

3004 Enabling the mailbox system (1 – Enable; 0 – Disable. The default value is 1.)

3011 Messaging forbidden during on-duty hours (1 – Enable; 0 – Disable; enabled by default).

Public mailbox parameter management

2302 Message notification extension of the public mailbox

2303 Message duration of the public mailbox

2304 Message quantity of the public mailbox

2305 Password of the public mailbox

Mailbox message prompt

The message indicator is switched on when there is a new message, and is not subjected to any other conditions.

3210 Message indicator control port. The default is 2. It means the message indicator signal instruction is transmitted by the secondary port of the attendant. It can be modified to 1, which means the primary port.

4207 Message indicator switch-on mode.

4208 Message indicator switch-off mode.

4209 Message notification mode, set to *6 by default (extension number).

Note: When a customer is leaving a message, and a message notification extension and a message indicator are set, both ports of the attendant must be in use at the same time. That is because one port is used to transmit message indicator signal while the other port is used to transmit

signal of the message notification extension.

Chapter 5 Consultation System

The LW-OP6200 consultation system is applicable to enterprises and institutions in various aspects like company introduction, service inquiry, product promotion, extension number query, and price query.

1. The LW-OP6200 provides query of 10-level multi-segment (255) single codes, and each segment allows 10-minute query of paragraphs, and each paragraph can correspond to a separate inquiry extension.
2. After playing each query speech, the system will automatically play an instruction after query, according to which, press * to listen again, press **#** to return to the previous level, and press **0** to transfer to the inquiry extension (specified in advance), and press **1** to **9** to proceed to the next level of query paragraph (if there is no lower-level query speech but an inquiry extension, transfer to the inquiry extension.)

3. According to the query operation sequence, the paragraph numbers for querying a speech paragraph refer to the numbers the user presses in sequence to reach this paragraph, as illustrated in the figure below:

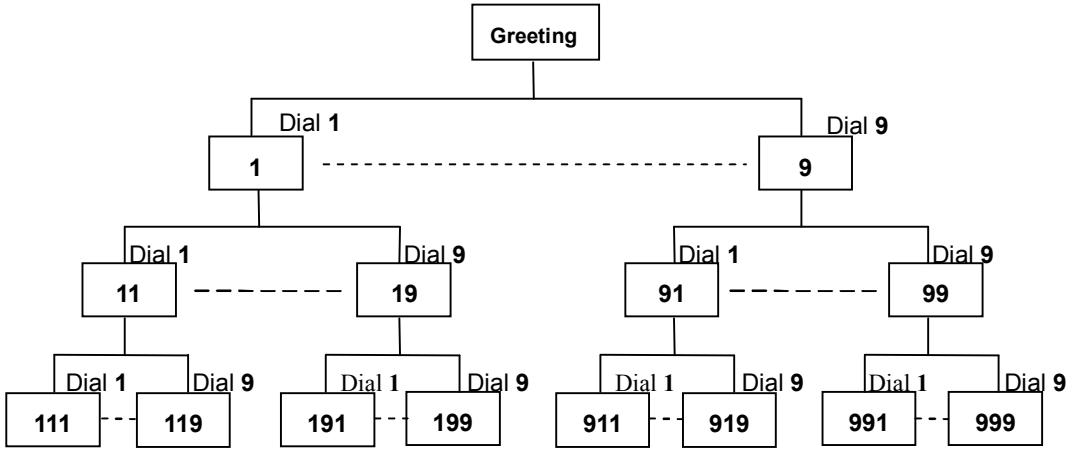


Figure 3-1 Inquiry system tree structure

7X Querying voice management, 7 + query code + #, "Press 1 to listen, press 2 to record again, press 3 to delete, or press any other key to exit".

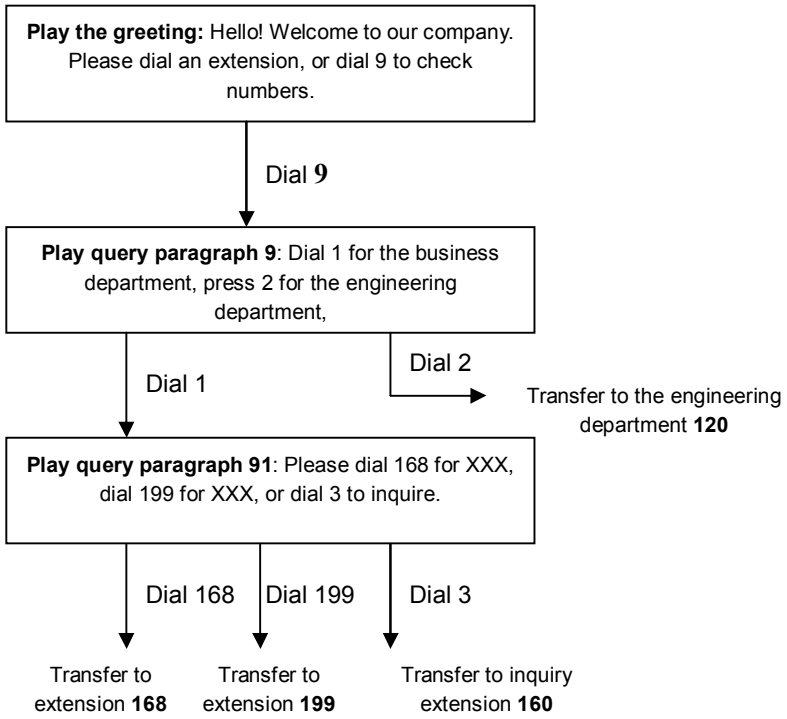
61X Querying extension management. 61 + query code + #. Input an extension number directly. *0 indicates to delete it.

2200 Deleting the query system

2201 Deleting all query extensions

2202 Deleting all query speeches

4. Example:


Play the greeting: Hello! Welcome to our company. Please dial an extension, or dial 9 to check numbers.
Dial 9
Play query paragraph 9: Dial 1 for the business department, press 2 for the engineering department,
Dial 1
Dial 2
Transfer to the engineering department **120**
Play query paragraph 91: Please dial 168 for XXX, dial 199 for XXX, or dial 3 to inquire.
Dial 168
Dial 199
Dial 3
Transfer to extension **168**
Transfer to extension **199**
Transfer to inquiry extension **160**

Enter the system program, and perform the following operations:

△ Record the speech of query paragraph 9 by inputting the code 79# and recording as prompted.

△ Record the speech of query paragraph 91 by inputting the code 791# and recording as prompted.

△ Set the inquiry extension of the query paragraph 92 to 120 by inputting 6192# and 120# in succession.

△ Set the inquiry extension of the query paragraph 913 to 160 by inputting 61913# and 160# in succession.

Note: The initial digit of a query paragraph number must be different from the operation code or language conversion code (for example, if the operator code is set to 9, avoid setting a query code, a query paragraph, and a paragraph inquiry extension to start with 9, because when 9 is dialed, the equipment will transfer to the operator automatically.)

Chapter 6 Backup Battery Use Guideline

Leawin's LW-OP6200 automated attendant reserves a backup battery input interface (see the BAT12V power port on the back of the equipment), through which a battery (purchased by users) can be used to supply power in case of mains supply failure.

1. A purchased battery must meet the requirements as follows:

The lead acid batteries for motorcycles and the UPS batteries with an output voltage of 12V/6Ah or 12V/12Ah that are available on the market are applicable. (Note: When a 6Ah battery is fully charged, it can work for up to 45 hours when attached to the attendant, and a 12Ah battery up to 90 hours). Users can select batteries of different capacities as required.

2. Installation method:

Plug the red "Y" terminal of the accessory battery line into the positive of the battery, and the black "Y" terminal into the negative.

Plug the other terminal, or the CH connector, into the BAT12V socket of the attendant.

3. Battery charge:

Leawin's LW-OP6200 automated attendant has a built-in battery charge circuit, with which a battery attached will be charged when there is mains supply. Depending on its capacity, a battery needs 5 to 10 hours for full charge. In the case that mains supply is guaranteed constantly, it is advised to unplug the battery line to prevent overcharge from damaging the battery. Moreover, keep the battery away from heat, which may impair its

performance.

Chapter 7 Appendixes

1. Code Table

Note: The values in [] are defaults of the parameters.

1. Extension number group and extension setting		
Code	Meaning	Setting Description
11GG	Setting a group start number	1. GG indicates a group number, ranging from 01 to 32. 2. Input up to 16 digits, and end with #. Input ***0** to delete it.
12GG	Setting a group end number	
13GG	Setting a group assistant extension	
10GG	Deleting a specified number group	GG indicates a group number, ranging from 01 to 32. Input **1** to confirm, and others to cancel.
1000	Deleting all extension number groups	Input **1** to confirm, and others to cancel.
3000	Transferring to the operator code	0 ~ 9
20MP	Setting the operator	1. M indicates a work period, ranging from 0 to 5. 0 means all work periods; 1 – On duty; 2 – Noon break; 3 – Off duty; 4 – Holiday; 5 – Temporary.P indicates a line, ranging from 0 to 2. 0 means all lines, 1 the first, and 2 the second. 2. Input up to 16 digits, and end with #. Input ***0** to delete it.
62X	Setting follow-me function	1. Code: input 62 + extension number, and end with #. 2. Input an extension number directly as the parameter value, and end with #. Input *0 to delete the follow-me number. 3. Input up to 16 digits for an extension number.
2100	Deleting all follow-me numbers	Input **1** to confirm, and others to cancel.

2. User functions and maintenance management		
Code	Meaning	Setting Description
410P	Times of ringing before answering of each line [1]	1. P indicates a line, ranging from 0 to 2. 1 means the first line, 2 the second, and 0 all lines. 2. Set 1 to 9 as the times of ringing.
310P	Default language of each line [1]	1. P indicates a line. 1 means the first line, 2 the second, and 0 all lines. 2. Set 1 as the first language, 2 the second, and 3 the third.
3601	First language conversion code	Input a number with up to 8 digits, and end with #. Input ***0** to delete it.
3602	Second language conversion code	
3603	Third language conversion code	
4000	Play volume [4]	Value range: 0 ~ 9.
4001	Record volume [3]	
4002	Key sensitivity test [4]	Value range: 0 ~ 9. The smaller the value, the better the sensitivity.
4003	Voice sensitivity test [4]	
4004	Signal tone sensitivity test [4]	
4005	Voice signal pick-out duration [10]	Value range: 4~30; unit: 30ms
4006	Signal tone error scope [1]	Value range: 1 ~ 9; unit: 30ms.
4007	Signal tone test method [1]	1 – Signal tone; 2 – Identification code; 3 – Signal tone + identification code.
4008	Internal line signal tone	1 – Full monitoring; 2 – Semi-monitoring; 3 – No

	monitoring mode [1]	monitoring.
4009	Dial tone test [1]	1 - Yes; 0 – No.
3001	Number acknowledgement [0]	
3002	Transfer to the operator if no extension is dialed	
3003	External line hang-up test [1]	

3. Timetable and system time

Code	Meaning	Setting Description
3400	Switching the current work period [0]	0 – Automatic switch; 1 – On duty; 2 – Noon break; 3 – Off duty; 4 – Holiday; 5 – Temporary.
3401	Work start and end time on Monday	1. Format: HHMMhhmm, with 8 digits in total. HHMM indicates work start time, and hhmm indicates work end time, both in the 24-hour format. For example, if you start work at 8:00, and get off work at 17:30, input 08001730. 2. Initial values: daily work period 0000~2400; noon break 0000~0000. That is, these are on-duty hours by default.
3402	Work start and end time on Tuesday	
3403	Work start and end time on Wednesday	
3404	Work start and end time on Thursday	
3405	Work start and end time on Friday	
3406	Work start and end time on Saturday	
3407	Work start and end time on Sunday	
3408	Noon break	
3409	System date and time	There are totally 11 digits, two for year, month, day, hour, and minute respectively, and one for week. Sunday is indicated by 7. For example, the time 10:15 on Thursday, December 25, 2008 is expressed by 08122510154.
35HH	Presetting a holiday	1. HH ranges from 01 to 64, indicating you can set up to 64 holidays. 2. This parameter has four digits, two for month and day respectively. For example, the date October 1 is expressed by 1001.
3500	Deleting all holidays	Input **1** to confirm. Other keys are invalid.

4. Wait time

Code	Meaning	Setting Description
3702	Wait-for-dial time [10]	Value range: 5 ~ 99 seconds.
3703	Dialing interval [2]	Value range: 1~99 seconds
33XM	Wait-for-answer transfer time [20]	1. X=1 indicates transfer to an extension, 2 indicates transfers to the operator, and 0 indicates simultaneous setting of an extension and the operator. M indicates a work period, ranging from 0 to 5. 0 means all work periods; 1 – On duty; 2 – Noon break; 3 – Off duty; 4 – Holiday; 5 – Temporary. 2. This parameter ranges from 5 to 600 seconds, and the default is 20 seconds.

5. PBX coordination time

Code	Meaning	Setting Description
4600	Flashing time [Automatic creation]	Up to 60000 in millisecond
4601	Estimated signal tone test time [300]	
4602	Signal tone identification code wait time [0]	
4603	Signal tone identification code intervals [510]	

4604	Delay after external line retrieval [300]	
4605	Time of waiting for signal tone after substituting for the extension [3000]	
4606	Delay after substitution [510]	
4607	Wait time during pause [2010]	
4608	Hang-up delay [2010]	
4609	Ringing tone close pick-out duration [4290]	
4610	Time of waiting for the initial code of a call type identification code [0]	
4611	Call type identification code intervals [510]	
4612	Delay after answer [510]	

6. Password setting

Code	Meaning	Setting Description
3600	Remote programming password [1234]	Input up to 8 digits, and end with #. The initial value is 1234. Input ***0** to delete it.
2305	Public mailbox password [1234]	
3610	Function password [1234]	

7. Greeting speech management, query speech management, and public mailbox management

Code	Meaning	Setting Description
5LVV	Recording speech management	1. L indicates a language type, ranging from 1 to 3. VV indicates a greeting code, ranging from 01 to 30 (refer to the Greeting Code Table.) 2. "Press 1 to listen, press 2 to record again, press 3 to delete, or press any other key to return to the previous level."
5L00	Deleting all self-recorded prompts in language L	Input **1** to confirm, and others to cancel.
5000	Deleting all self-recorded prompts	Input **1** to confirm, and others to cancel.
61X	Inquiry extension	1. Code: input 61 + query paragraph + abbreviated code, and end with #. 2. Input an extension number, and end with #. Input ***0** to delete the inquiry extension of the specified query paragraph.
2201	Deleting all inquiry extensions	Input **1** to confirm, and others to cancel.
7X	Querying speech management	Code: input 7 + query paragraph, and end with #. "Press 1 to listen, press 2 to record again, press 3 to delete, or press any other key to return to the previous level."
2202	Deleting all inquiry speeches	Input **1** to confirm, and others to cancel.
2200	Deleting the query system	
2302	Message notification extension of the public mailbox	Input an extension number, and end with #. Input up to 16 digits. Input ***0** to delete it.
2303	Duration of a message in the public mailbox [180]	Value range: 20 ~ 999 seconds.
2304	Quantity of messages in the public mailbox [310]	Value range: 1 ~ 310 pieces.
3011	Forbidding leaving a message during on-duty hours [1]	1 - Yes; 0 – No.
3210	Message indicator	1 – first port; 2 – second port.

	control port [2]	

8. Operation modes of PBX functions

Code	Meaning	Setting Description
4200	Transfer to an external line [FX]	Special character input method: Input up to 8 digits, and end with #. Special character input methods: * Please input **. # Please input *1. A Please input *2. B Please input *3. C Please input *4. D Please input *5. Extension number (X) Please input *6. Flash (F) Please input *7. Hang-up (H) Please input *8. Pause (P) Please input *9. Deletion Please input *0.
4201	External line release after answer	
4202	External line release without answer	
4203	External line retrieval without answer [F]	
4204	External line retrieval on busy [F]	
4205	External line retrieval for a vacant number [F]	
4206	External line retrieval for specified substitution [F]	
4207	Message indicator switch-on mode	
4208	Message indicator switch-off mode	
4209	Message notification operation mode [X]	
4400	Ringing tone identification code	Input up to 8 digits, and end with #. Special character input methods: * Please input **. # Please input *1. A Please input *2. B Please input *3. C Please input *4. D Please input *5. Deletion Please input *0.
4401	Ringing tone identification code 2	
4402	Busy line identification code	
4403	Vacant number/error tone identification code	
4404	No-disturb identification code	
4405	Answer identification code	
4406	Answer identification code 2	
4407	Dial tone identification code	
4408	Release identification code	
4409	Acknowledgement identification code	Input up to 8 digits, and end with #. Special character input methods: * Please input **. # Please input *1. A Please input *2. B Please input *3. C Please input *4. D Please input *5. Deletion Please input *0.
4410	Ringing tone identification code for transfer to the attendant (VM) port	
4411	Busy line identification code for transfer to the attendant (VM) port	
4700	No-answer callback identification code	
4701	Busy-line callback identification code	
4702	Forward all identification code	
4703	No-answer forward identification code	
4704	Busy-line forward identification code	
4705	Internal call identification code	

4706	External call identification code	
4707	Direct incoming call identification code	
4708	Message call identification code	
4709	Overflow identification code	
4800	The codes 4800~4809 correspond respectively to the beginning of the extension numbers of the codes 4700~4709 (0 indicates the start code.)	
4801		
4802		
4803		
4804		
4805		
4806		
4807		
4808		
4809		
4900	The codes 4900~4909 correspond respectively to the length of the extension numbers of the codes 4700~4709.	
4901		
4902		
4903		
4904		
4905		
4906		
4907		
4908		
4909		

9. Equipment cascade copying and parameter configuration setting

Code	Meaning	Setting Description
9700	Copying all data (parameter configuration,	
9701	Copying parameter configuration + synchronous clock	
9702	Copying self-recorded greetings	
9703	Copying query speeches	
9704	Copying mailbox configurations	
9901~9905	Backup of configurations 1 to 5	Input **1** to confirm, and others to cancel.
9801~9805	Restoring configurations 1 to 5	
9800	Restoring default configurations	
*900	Saving changes and Exiting programming	
*903	Exiting programming without saving changes (valid before power-off of the equipment, but lost after power-off)	
*904	Restoring factory configurations	Input **1** to confirm, and others to cancel.
*910	Reloading configurations (restoring the parameter settings saved previously)	

10. Function setting (dial into the system and operate as prompted by the greetings)

Code	Meaning	Setting Description
**90	Entering the programming status	
**50	Entering the public mailbox	
**10 + function password	Rechecking the signal tone	Enter the signal tone checking process as prompted.
**11 + function password	Checking the ring-back tone	

**12 + function password	Checking the internal line busy tone	
**13 + function password	Checking the vacant number tone	
**14 + function password	Checking the external line busy tone	Prompt the peer to hang up to check the signal tone
**20 + function password	Rechecking the flashing intervals	
**30 + function password	Rechecking the flashing interval and signal tone	
**70 + function password	Returning to automatic switch during work period	
**71 + function password	Switching to on-duty during work period	
**72 + function password	Switching to noon break during work period	
**73 + function password	Switching to off-duty during work period	
**74 + function password	Switching to holiday during work period	
**75 + function password	Switching to temporary during work period	

2. Greeting Code Table

Greeting Code	Description	Record Sample
01	On-duty greeting	Hello! Welcome to our company. Please dial an extension, or dial zero for the operator, or press the pound sign to leave a message.
02	Noon break greeting	Hello! Welcome to our company. It is noon break now. Please dial an extension, or press the pound sign to leave a message, or dial 0 for service from the attendant.
03	Off-duty greeting	Hello! Welcome to our company. It is off duty now. Please dial an extension, or press the pound sign to leave a message, or dial 0 for service from the attendant.
04	Holiday greeting	Hello! Welcome to our company. Today is a holiday. Please dial an extension, or press the pound sign to leave a message, or dial 0 for service from the attendant.
05	Temporary notice	Hello! Welcome to our company. Please dial an extension, or dial zero for manual service, or press the pound sign to leave a message.
06	No-answer announcement (on duty)	Sorry, but your call is not answered. Please dial another extension, or press the asterisk to wait, or dial 0 for the operator.
07	No-answer announcement (off duty)	Sorry, but your call is not answered. Please dial another extension, or press the asterisk to wait, or dial 0 for the operator, or press the pound sign to leave a message.
08	Busy extension announcement (on duty)	Sorry, but the extension you are calling is busy. Please dial another extension, or press the asterisk to wait, or dial 0 for the operator.
09	Busy extension announcement (off duty)	Sorry, but the extension you are calling is busy. Please dial another extension, or press the asterisk to wait, or dial 0 for the operator, or press the pound sign to leave a message.

10	Vacant number announcement (on duty)	Sorry, but the number you dial is a vacant number. Please dial another extension, or press 0 for the operator.
11	Vacant number announcement (off duty)	Sorry, but the number you dial is a vacant number. Please dial another extension, or press 0 for the operator, or press the pound sign to leave a message.
12	Busy operator announcement	Sorry, but the operator is busy now. Please dial another extension, or press the asterisk to wait.
Greeting Code	Description	Record Sample
13	Busy operator announcement	Sorry, but the operator is busy now. Please dial another extension, or press the asterisk to wait, or press the pound sign to leave a message.
14	Instruction after query	Press the asterisk to listen again, press the pound sign to return to the previous level, or press 0 for manual service.
21	Prompt again for dialing no number (on duty)	Please dial an extension, or press 0 for the operator.
22	Prompt again for dialing no number (off duty)	Please dial an extension, or press 0 for the operator, or press the pound sign to leave a message.
23	Wait request	Wait a moment, please.
24	Wait request (transferring to the operator)	Please wait a moment for service from the operator.
25	Hang-up announcement	Sorry, but we will hang up. Thank you for your call. Goodbye.
26	Mailbox full	The mailbox is full. No more message can be accepted.
27	Message prompt	Please start your message after BEEP, and end your message by pressing the pound sign.
28	Message overtime prompt	Sorry, but the time for your message expires. Thank you for your call. Goodbye.
29	Message ending prompt	Thank your for your message. Please call again. Goodbye.
30	Called extension prompt (full monitoring)	You have a call. It is going to you.

3. FAQ

Symptom	Possible Causes and Solutions
It is constantly impossible to get through to the automated attendant when dialing it with an extension.	● If the power indicator is off, please check the power supply. ● If the power indicator is flashing, please check the connection lines, RJ-45 connector, and extension number of the attendant.
It is occasionally impossible to get through to the attendant when dialing it with an extension.	Check whether the RJ-45 connector and the PBX line connection are in good condition. Substitute other line connections, and try dialing to locate the problem.
When the attendant is used to transfer another extension, after the extension number is input, the prompt “Wait a moment, please” is heard, followed by dialing sound, but afterwards there is a mute, and then	● Enter equipment programming, input 9800 to return the equipment to its default configurations, and reconnect the PBX extension line to check the signal tone automatically, or after connecting the PBX extension, dial into the equipment to enter the greeting, and then dial “**10 + function password” to

the equipment hangs up.	check the signal tone manually. ● The default flashing duration of the equipment is shorter than the flashing duration of the user's PBX, so the value in the equipment parameter 4600 must be increased to 500, 600, 700, or 1000. ● The external line transfer mode is incorrect, or a function code must be added for external line transfer. Therefore, set the codes 4200 and 4300. ● The port for the equipment has no right or capability to transfer an external line. Therefore, please check the setting of the PBX.
When the attendant is used to transfer another extension, the equipment hangs up after the prompt "Wait a moment, please" is announced.	● Enter equipment programming, input 9800 to return the equipment to its default configurations, and reconnect the PBX extension line to check the signal tone automatically, or after connecting the PBX extension, dial into the equipment to enter the greeting, and then dial "**10 + function password" to check the signal tone manually. ● The default flashing duration of the equipment is longer than the flashing duration of the user's PBX, so the value in the equipment parameter 4600 must be decreased to 400, 300, and 200. ● The external line transfer mode is incorrect, or a function code must be added for external line transfer. Therefore, set the codes 4200 and 4300. ● The port for the equipment has no right or capability to transfer an external line. Therefore, please check the setting of the PBX.
The beginning part of the external line prompt "Sorry, but the extension is busy…" or "Sorry, the number you dial is a vacant number…" is inaudible or incomplete.	It indicates the delay is not long enough after the equipment retrieves an external line. Therefore, increase the value of the equipment parameter 4604 to 500, 800, or 1000.

Symptom	Possible Causes and Solutions
The beginning part of the external line prompt "Sorry, but your call is not answered…" is inaudible.	● If the equipment works in the full-monitoring mode, it indicates the delay is not long enough after the equipment retrieves an external line. Therefore, increase the value of the equipment parameter 4604 to 500, 800, or 1000. ● If the equipment works in the semi-monitoring mode, it indicates the delay is not long enough after the substitute extension retrieves an external line. Therefore, increase the value of the parameter 4606 to 2500, or 3000.
The equipment hangs up while the external line does not.	It is possible that the signal tone of the external line has a big noise. Modify the parameter value of the code 3003 - External line hang-up test to 0, that is, to disable the test, and check whether the external line hangs up.
The substitution function code has bee set, but it is still the first speech of greeting that is announced when the extension is not answered.	● Check whether the equipment is working in the semi-monitoring mode. If not, modify the code 4008 to 2, that is, to the semi-monitoring status. ● The transfer callback time of the PBX is possibly shorter than the substitution time of the equipment. Therefore, decrease the parameter value of the code 3300 to 15 and 10. ● It is possible that the extension rejects call substitution.
When the equipment is in the full-monitoring status, an extension	Decrease the default value (4) of the code 4003 - Voice sensitivity test to a proper extent (the smaller

cannot get through to the external line two or three seconds after off-hook.	the value, the more sensitive the voice test, so this value cannot be modified willfully.)
When the equipment is in the full-monitoring status, the external line is disconnected before getting through to an extension.	Increase the default value (4) of the code 4003 - Voice sensitivity test to a proper extent (the larger the value, the less sensitive the voice test, so this value cannot be modified willfully).
When an extension is transferred to another, there is a delay before the called extension is reached.	● Change the equipment to work in the semi-monitoring mode. ● If the prompt of no answer is needed, specify a substitution mode or a substitution code in the semi-monitoring mode.
It is no exception that the external line rings two or three times before the greeting is heard.	The times of ringing of the equipment is too large. Modify the code 4100 to 1. If the times of ringing of the equipment is already the minimum, check the corresponding setting of the PBX.
When a PBX with calling number display is configured with an attendant, the caller ID display becomes abnormal.	Set the default times (1) of ringing before a call is answered to 2, so as to avoid any caller ID display information in the DTMF mode.
Symptom	Possible Causes and Solutions
It is impossible to announce busy line, vacant number, or no answer.	● The port for the equipment has no right or capability to retrieve an external line. Therefore, check the setting of the PBX.
	● The external line retrieval method or function code is incorrect. ● If the signal tone is too slow to appear, or there are different prompts prior to the signal tone, please increase the value of the code 4601 - Estimated signal tone test time. ● The signal tone is weak. Therefore, set the code 4004 - Signal tone sensitivity test. ● The signal tone is irregular. Therefore, adjust the code 4006 - Signal tone error scope. ● If the code 4007 is set to 2, the possible cause is that the code 4601 is too long, because in the identification code detection mode, the code 4601 should be set to 0 in general; or the code 4602 identification code wait time is not long enough or set to 0 (disabling identification code check); or the identification code is incorrect, or the code 4603 identification code interval is incorrect, or the identification code has a special format.
During work periods, the equipment plays incorrect greetings.	Please check whether the system time is correct by checking the code 3490. Check whether the work and rest time is set correctly by checking the codes 3400 to 3408. Check whether the work and rest time is shifted automatically by checking the code 3400.
It is no exception that when the attendant is used to transfer an extension, the prompt “Wait a minute, please” can be heard 2 or 3 seconds after the extension number	Please check whether an extension group is set.

is input.	
After a call enters the attendant, the indicator of LINE1 or LINE2 is switched on, but there is a mute or busy tone.	Please check whether there exits a greeting in the corresponding period, or whether it is recorded correctly.
It is impossible to transfer to the operator after dialing 0.	Check whether the operator code has been changed.
The operator does not ring although the user has set the function of transfer to the operator if no number is dialed.	Check whether an assistant extension is set. If yes, please clear the assistant extension. Otherwise, the call will be transferred to this assistant extension.
It is impossible to leave a message.	The mailbox system is set as disabled or you leave a message during on-duty hours (messaging forbidden during on-duty hours by default).
The message indicator on the message notification extension is off.	The message indicator enabling and disabling settings are wrong. Both ports of the attendant must be in use at the same time. That is because one port is used to transmit message indicator signal while the other port is used to transmit signal of the message notification extension.
Callback ringing is unavailable in the message notification extension.	The system time stops running; the message notification is beyond the message notification period; or the notification interval is too long or set as 0 (message notification disabled).

4. Some PBX Substitution Operations and Functional Codes

4206 Setting the way of specifying a substitute to retrieve an external line

Mode and Function	Substitution	End Code	Operation Mode

Code / PBX Model	Code		
Panasonic KX-TD88CN	41		41*6
Panasonic KX-TD510	41		41*6
Panasonic KX-TA30	4		4*6
Panasonic KX-TES824CN	4		4*6
Panasonic KX-TEB308CN	4		4*6
Panasonic KX-TDA100	*41		**41*6
Panasonic KX-TDA200	*41		**41*6
Samsung iDCS500	65		65*6
Samsung DCS-60i	65		65*6
Samsung DCS-180i	65		65*6
Samsung SKP-60NX	10		10*6
Samsung SKP-820NX	10		10*6
Leawin LX-6000	10		10*6
Siemens 3550	*59		**59*6
Siemens 3700/3750	*59		**59*6
Vanda AK8120/DK1208	155		155*6
Tongli	*54	*	**54*6**